How can I be exposed?

- 1. When mercury is not contained properly, its vapors get into the air, and you will breathe the vapors in, absorbing most of the mercury.
- **2.** Mercury can be **absorbed** through the skin.
- 3. When **swallowed**, small amounts of liquid mercury is absorbed into your blood.

Mercury vapor is especially dangerous because it can get into carpets, curtains, furniture, and cracks in the floors. It can stay there for months or years, slowly letting off more vapors.

Children are more at risk for mercury exposure because it settles near the floor where children breathe the vapors or eat the droplets.

What are the health effects?

Mercury can cause permanent damage to your brain and central nervous system, resulting in behavioral or learning **problems**. It is especially dangerous for young children and fetuses, whose brains are still developing. The health effects depend on how much is absorbed and for how long a person is exposed.

It may take a long time for noticeable symptoms to develop. These include:

- ✓ shaky hands
- redness or swelling of the mouth or gums
- memory loss
- headache
- loss of appetite

Vapors breathed in by pregnant women can harm the developing fetus. Mercury can also be passed to a baby through breast milk.

Contacts for More Information:

- ✓ U.S. Environmental Protection Agency http://www.epa.gov/mercury
- ✓ Agency for Toxic Substances and Disease Registry http://www.atsdr.cdc.gov/alerts

Contacts for methylmercury in fish:

- ✓ U.S. Food and Drug Administration (fish) from stores or restaurants) 24-hr toll free hotline 1-888-SAFE-FOOD http://www.cfsan.fda.gov
- ✓ U.S. Environmental Protection Agency (fish) you catch yourself in fresh water) http://www.epa.gov/ost/fish

TEST YOUR MERCURY KNOWLEDGE

- 1. Mercury is found in:
 - a) fish
- b) fluorescent lights
- c) school labs
- d) all of the above
- 2. Mercury poisoning can cause:
 - a) birth defects
- b) kidney damage
- c) brain damage
- d) all of the above
- 3. If you spill 2 tsp. of mercury you should:
 - a) call Poison Control b) panic
 - c) wipe it up with a cloth d) vacuum it up
- 4. Of the following, what is the smallest amount of mercury that can cause health effects?
 - a) one gallon
- b) one pint
- c) half a teaspoon
- d) three tons
- 5. Liquid mercury is MOST dangerous when:
 - a) you breathe its vapors b) it is on your skin
 - c) inside a thermometer d) you swallow it
 - Answers: 1)d, 2)d, 3)a, 4)c, 5)a

Office of Superfund Remediation and Technology Innovation OSWER # 9285.7-74 EPA# EPA-540-K-04-002 April 2004



This pamphlet can answer your questions about mercury and help you choose the best ways to protect yourself and your family.

What is mercury?

Mercury is a silver-gray liquid metal, that's also known as "quick silver". It is a hazardous chemical that, even in small amounts. can cause serious health problems. It can linger indoors for months or even years, and it slowly evaporates into the air. Its vapors cannot be seen or smelled, but breathing them can cause harmful effects.

Where is mercury found?

- ✓ Mercury is used to make many home products including thermometers, electrical switches, fluorescent lights, thermostats, and batteries.
- In some cultural traditions, mercury is used as a folk remedy or for spiritual practice.
- Some utility devices in your home may contain mercury, such as pressure control units attached to your gas meter.
- Certain instruments used by plumbers can contain mercury. Sometimes these instruments can leak or spill in your home.
- Certain types of fish contain mercury in a form known as methylmercury. When we eat those fish, it is absorbed by our bodies.

How can I prevent or reduce exposure?

- ✓ Make sure your schools and home are mercury-free, and that your children recognize mercury and its dangers. For more information, visit the Mercury in Schools Website at http://www.mercuryinschools.uwex.edu
- Clean up spills properly (see section on how to clean up mercury).
- Do not use mercury or mercury-containing products when substitutes are available.
- ✓ If you do use mercury, keep it sealed from the air—never take it out of its container.
- If you store or use mercury, it is best to do it outside. If you must have it inside, keep it in unbreakable, disposable containers. Never put it on the floor, furniture, or carpet.
- ✓ Get tested to see if you have been exposed.
- ✓ Moderate your fish intake; select species that are low in mercury. See back panel for resources on mercury in fish.
- Contact your local fire or health department if you find uncontained mercury.

Have I been exposed?

All of us have been exposed to some amount of mercury during our lives. However, the only way to know if you have dangerous amounts of mercury vapor in your home is to have a qualified professional test the air inside your home with special equipment. You can also measure the amount of mercury in your urine or blood with a laboratory test. You can call your doctor to get more information on mercury testing.

I have been exposed. What do I do?

If you have high levels of mercury in your body, a doctor can prescribe treatments to remove the mercury.

If you have mercury in your home, you may be able to clean up small amounts (less than a teaspoon) by yourself. For more than a teaspoon, you need professional assistance.

How can I dispose of products containing mercury?

Counties and municipalities often host hazardous waste clean-up days or thermometer exchange programs, during which you can bring in mercury-containing products for safe disposal. Call your local fire or health department for more information.

If the mercury in these devices is not properly contained, get it out of your house immediately. Do not wait for a clean-up day. Seek immediate assistance.

Clean-up or Disposal of Large Amounts of Mercury

DO NOT clean up larger amounts of mercury yourself. For more than one teaspoon, isolate the spill area and call your local fire or health department. For more than two teaspoons call the National Response Center (NRC) at (800)



424-8802. The NRC hotline operates 24 hours a day, 7 days per week.

How do I clean up small mercury spills myself (less than 1 teaspoon)?

Mercury breaks into lots of tiny beads that roll around, stick to surfaces and get in small cracks.

DO NOT use a vacuum cleaner,

broom, or mop. They will spread the mercury around, and draw more mercury vapor into the air.

DO NOT pour mercury down drains or flush it down the toilet. It can get trapped and continue to give off poisonous vapors.

YOU CAN clean small amounts (up to one teaspoon) from flat surfaces like tile, or linoleum, using the items listed below. If mercury has been spilled on carpets, curtains, upholstery or other absorbent surfaces, throw them away.

Keep children and pets away from the area. Remove gold jewelry, as mercury can damage it.

You will need:

- ✓ 4-5 zip-lock bags
- ✓ trash bag
- ✓ rubber or latex gloves
- paper towels
- ✓ cardboard or squeegee
- eyedropper
- ✓ wide tape
- flashlight

Instructions:

- **1.** Put on gloves. Clear area of children and pets to prevent tracking mercury elsewhere.
- **2.** If there is broken glass, pick the pieces up carefully, place them on a paper towel, put them in a plastic bag and seal.
- 3. Use the cardboard or squeegee to collect the mercury beads together. Use the flashlight to look all over for remaining beads, which may be stuck to surfaces or lodged in floor cracks.
- **1.** Use the eye dropper to draw up the beads. Slowly squeeze them into a damp paper towel. Put the towel in a plastic bag and seal.
- 5. Use the sticky side of the wide tape to pick up remaining glass and mercury beads. Place it in another plastic bag and seal.
- Place the cardboard or squeegee into a plastic bag and seal.
- 7. Carefully remove the gloves and put them in a plastic bag and seal.
- 8. Put all sealed bags into a sealed garbage bag and dispose of according to local and state laws. Contact your fire or health department for more information.
- 9. Remember to keep a window open (with a fan blowing out) for 24 hours to ventilate the area. Continue to keep children and pets out of the cleanup area. If sickness occurs, seek medical attention immediately.
- **10.** For more information visit: http://www.epa.gov/epaoswer/hazwaste/mercury/spills.htm